REMARKS

Claims 1, 2, 4-9, 16-17 and 19-33 are pending and under consideration in the above-identified application. Claims 3, 10-15 and 18 were previously cancelled and remain cancelled.

In the Office Action of September 7, 2010, claims 1, 2, 4-9, 16-17 and 19-33 were rejected.

With this Amendment, no claim is amended.

I. 35 U.S.C. § 102 Anticipation and § 103 Obviousness Rejections of Claims

Claims 1, 2, 4-8, 16, 17, 19-23 and 27-33 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Fox* (U.S. Patent No. 6,566,697).

Claims 9 and 24 were rejected under 35 U.S.C. § 103(a) as being obvious in view of *Fox*.

Claim 25 was rejected under 35 U.S.C. § 103(a) as being obvious in view of *Fox* and *Fossum* (U.S. Patent No. 6,624,456).

Claim 26 was rejected under 35 U.S.C. § 103(a) as being obvious in view of *Fox* and *Applicant Admitted Prior Art* (*"AAPA"*).

In relevant part, each of the independent claims 1, 16, 27, 30, 32 and 33 recite a threshold channel potential for turning on a drain transistor and for turning on a transfer transistor that are both set to a value higher than a potential which depletes a photoelectric converting element.

This is clearly unlike *Fox* which fails to disclose or even suggest a threshold channel potential for turning on a drain transistor and for turning on a transfer transistor that are both set to a value higher than a potential which depletes a photoelectric converting element. Instead, *Fox* discloses the depletion of the N portion of a photodiode by **selecting the implant doses of the photodiode** such that the n region can be completely voided of majority carriers while the p surface region is not completely voided. See, U.S. Pat. No. 6,566,697, Col. 9, l. 6-27. This cannot fairly be viewed as disclosing a threshold channel potential for turning on a drain transistor and for turning on a transfer transistor that are both set to a value higher than a potential which depletes a photoelectric converting element because *Fox* only discloses adjusting the doping profile of the photodiode so that a portion of the photodiode can be depleted by a drain or transfer transistor while another portion retains a charge. Nowhere does *Fox* disclose anything pertaining to the threshold values of any transistor being adjusted in relation to the photodiode.

Fossum and *AAPA* do not disclose anything pertaining a threshold channel potential for turning on a drain transistor and for turning on a transfer transistor which are both set to a value higher than a potential which depletes a photoelectric converting element.

As the Applicant's specification teaches, by providing a threshold channel potential for turning on a drain transistor and for turning on a transfer transistor that are both set to a value higher than a potential which depletes a photoelectric converting element, a sensitive preferred image output is produced while exposure time and light noise is reduced. See, U.S. Pat. Pub. No. 2004/0130757, Para. [0129]-[0130]. Further, because the channel potentials are set to a value higher than the potential to deplete a photoelectric conversion element, the drain transistor changes state repeatedly during a non-exposure time which eliminates any difference in the output image between rows of pixels. See, See, U.S. Pat. Pub. No. 2004/0130757, Para. [0120]-[0125].

Therefore, because *Fox, Fossum, AAPA* and any possible combination of them fails to disclose or even fairly suggest every feature of claims 1, 16, 27, 30, 32 and 33, the rejection of claims 1, 16, 27, 30, 32 and 33 cannot stand. Because claims 2, 4-9, 17 and 19-26, 31 depend, either directly or indirectly, from claims 1, 16, 27, 30, 32 and 33, they are allowable for at least the same reasons.

II. Conclusion

In view of the above amendments and remarks, Applicant submits that the claims are clearly allowable over the cited prior art, and respectfully requests early and favorable notification to that effect.

Respectfully submitted,

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